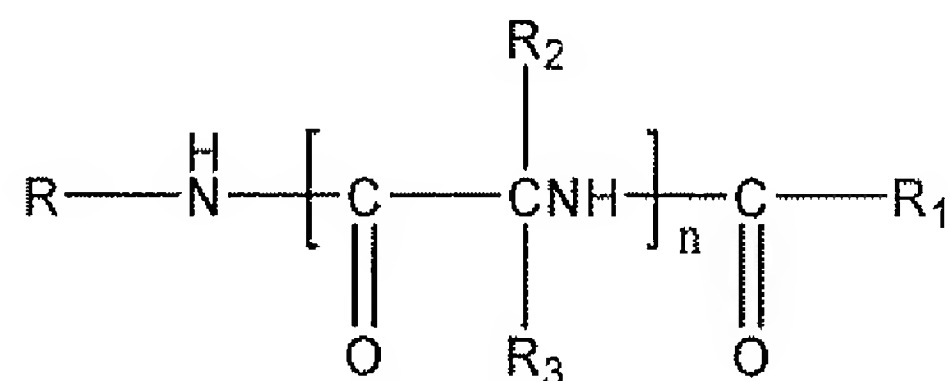


## IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the present application. Attention is drawn to insertions and deletions by showing these in bold face.

1 (currently amended). ~~Use of~~ **A method for preventing or treating a condition associated with cortical spreading depression (CSD) in a subject, comprising administering to the subject, in an amount effective to suppress CSD,** a compound having the Formula (Ib)



Formula (Ib)

wherein

R is hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl, aryl lower alkyl, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl or lower cycloalkyl lower alkyl, and R is unsubstituted or is substituted with at least one electron withdrawing group ~~or/and~~ **or** at least one electron donating group;

R<sub>1</sub> is hydrogen or lower alkyl, lower alkenyl, lower alkynyl, aryl lower alkyl, aryl, heterocyclic lower alkyl, lower alkyl heterocyclic, heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl, each unsubstituted or substituted with at least one electron donating group ~~or/and~~ **or** at least one electron withdrawing group;

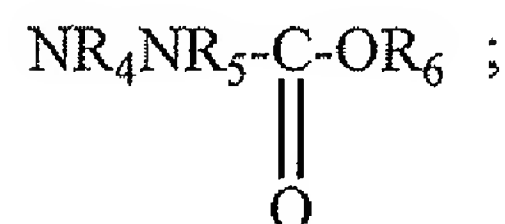
R<sub>2</sub> and R<sub>3</sub> are independently hydrogen, lower alkyl, lower alkenyl, lower alkynyl, aryl lower alkyl, aryl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic, lower cycloalkyl, lower cycloalkyl lower alkyl, or Z-Y<sub>2</sub> wherein R<sub>2</sub> and R<sub>3</sub> may be unsubstituted or substituted with at least one electron withdrawing group ~~or/and~~ **or** at least one electron donating group; and wherein heterocyclic in R<sub>2</sub> and R<sub>3</sub> is furyl, thienyl, pyrazolyl, pyrrolyl, methylpyrrolyl, imidazolyl, indolyl,

thiazolyl, oxazolyl, isothiazolyl, isoxazolyl, piperidyl, pyrrolinyl, piperazinyl, quinolyl, triazolyl, tetrazolyl, isoquinolyl, benzofuryl, benzothienyl, morpholinyl, benzoxazolyl, tetrahydrofuryl, pyranyl, indazolyl, purinyl, indolyl, pyrazolindinyl, imidazolyl, imidazolindinyl, pyrrolidinyl, furazanyl, N-methylindolyl, methylfuryl, pyridazinyl, pyrimidinyl, pyrazinyl, pyridyl, epoxy, aziridino, oxetanyl, azetidiny or, when N is present in the heterocyclic, an N-oxide thereof;

Z is O, S, S(O)<sub>a</sub>, NR<sub>4</sub>, NR<sub>6</sub>', **[[or]]** PR<sub>4</sub> or a chemical bond;

Y is hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl, lower alkynyl, halo, heterocyclic, heterocyclic lower alkyl, lower alkyl heterocyclic and Y may be unsubstituted or substituted with at least one electron donating group ~~or/and~~ or at least one **[[an]]** electron withdrawing group, wherein heterocyclic has the same meaning as in R<sub>2</sub> and R<sub>3</sub> and, provided that when Y is halo, Z is a chemical bond, or

**[[ZY]]** Z-Y taken together is NR<sub>4</sub>NR<sub>5</sub>R<sub>7</sub>, NR<sub>4</sub>OR<sub>5</sub>, ONR<sub>4</sub>R<sub>7</sub>, OPR<sub>4</sub>R<sub>5</sub>, PR<sub>4</sub>OR<sub>5</sub>, SNR<sub>4</sub>R<sub>7</sub>, NR<sub>4</sub>SR<sub>7</sub>, SPR<sub>4</sub>R<sub>5</sub>, PR<sub>4</sub>SR<sub>7</sub>, NR<sub>4</sub>PR<sub>5</sub>R<sub>6</sub>, PR<sub>4</sub>NR<sub>5</sub>R<sub>7</sub>, **[[or]]** N<sup>+</sup>R<sub>5</sub>R<sub>6</sub>R<sub>7</sub>,  $\text{NR}_4\text{C}-\text{R}_5$ ,  $\text{SCR}_5$ ,  $\text{NR}_4\text{C}-\text{OR}_5$ ,  $\text{SC}-\text{OR}_5$ , or

$$\begin{array}{cccc} \text{O} & \text{O} & \text{O} & \text{O} \\ \parallel & \parallel & \parallel & \parallel \\ \text{NR}_4\text{NR}_5\text{C}-\text{OR}_6 & & & \end{array}$$


R<sub>6</sub>' is hydrogen, lower alkyl, lower alkenyl, or lower alkynyl which may be unsubstituted or substituted with at least one electron withdrawing group ~~or/and~~ or at least one electron donating group;

R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> are independently hydrogen, lower alkyl, aryl, aryl lower alkyl, lower alkenyl, or lower alkynyl, wherein R<sub>4</sub>, R<sub>5</sub> and R<sub>6</sub> may independently be unsubstituted or substituted with at least one electron withdrawing group ~~or/and~~ or at least one electron donating group; **[[and]]**

R<sub>7</sub> is R<sub>6</sub> or COOR<sub>8</sub> or COR<sub>8</sub>, which R<sub>7</sub> may be unsubstituted or substituted

with at least one electron withdrawing group ~~or/and~~ or at least one electron donating group;

R<sub>8</sub> is hydrogen or lower alkyl, or aryl lower alkyl, and the aryl or alkyl group may be unsubstituted or substituted with at least one electron withdrawing group ~~or/and~~ or at least one electron donating group;

**[[and]]**

n is 1-4; and

a is 1-3,

or **[[of]]** a pharmaceutically acceptable salt thereof, ~~for the preparation of a pharmaceutical composition useful for the prevention, alleviation or/and treatment of headache or/and painful conditions associated with or/and caused by cortical spreading depression (CSD).~~

2 (currently amended). ~~Use according to~~ The method of claim 1, wherein ~~wherein the headache~~ the CSD-associated condition is chronic headache.

3 (currently amended). ~~Use according to claims 1 or 2~~ The method of claim 1, wherein the ~~headache~~ CSD-associated condition is migraine.

4 (currently amended). ~~Use according to~~ The method of claim 3, wherein the migraine is ~~for the manufacture of a medicament for the treatment of~~ acute migraine.

5 (currently amended). ~~Use according to any one of claims 1 to 4~~ The method of claim 1 wherein, in the compound of Formula (Ib), one of R<sub>2</sub> and R<sub>3</sub> is hydrogen.

6 (currently amended). ~~Use according to any one of claims 1 to 5~~ The method of claim 1 wherein, in the compound of Formula (Ib), n is 1.

7 (currently amended). ~~Use according to any one of claims 1 to 6~~ The method of claim 1 wherein, in the compound of Formula (Ib), at least one of R<sub>2</sub> and R<sub>3</sub> is hydrogen and n is 1.

8 (currently amended). ~~Use according to any one of claims 1 to 7~~ The method of claim 1 wherein, in the compound of Formula (Ib), R is aryl lower alkyl and R<sub>1</sub> is lower alkyl.

9 (currently amended). ~~Use according to any one of claims 1 to 8~~ The method of claim 1 wherein, in the compound of Formula (Ib),

R<sub>2</sub> and R<sub>3</sub> are independently hydrogen, lower alkyl, or  $[[ZY]] \text{ } \underline{Z-Y}$ ;  
 Z is O, NR<sub>4</sub> or PR<sub>4</sub> $[[;]]$  and Y is hydrogen or lower alkyl; or  
 $[[ZY]] \text{ } \underline{Z-Y}$  is NR<sub>4</sub>NR<sub>5</sub>R<sub>7</sub>, NR<sub>4</sub>OR<sub>5</sub>, ONR<sub>4</sub>R<sub>7</sub>, NR<sub>4</sub>C-R<sub>5</sub> or NR<sub>4</sub>C-OR<sub>5</sub> .  

$$\begin{array}{cc} \parallel & \parallel \\ \text{O} & \text{O} \end{array}$$

10 (currently amended). ~~Use according to~~ The method of claim 9 wherein, in the compound of Formula (Ib),

R<sub>2</sub> is hydrogen and  $[[\text{and}]]$  R<sub>3</sub> is lower alkyl, or  $[[ZY]] \text{ } \underline{Z-Y}$ ;  
 Z is O, NR<sub>4</sub> or PR<sub>4</sub> $[[;]]$  and Y is hydrogen or lower alkyl; or  
 $[[ZY]] \text{ } \underline{Z-Y}$  is NR<sub>4</sub>NR<sub>5</sub>R<sub>7</sub>, NR<sub>4</sub>OR<sub>5</sub>, ONR<sub>4</sub>R<sub>7</sub>, NR<sub>4</sub>C-R<sub>5</sub> or NR<sub>4</sub>C-OR<sub>5</sub> .  

$$\begin{array}{cc} \parallel & \parallel \\ \text{O} & \text{O} \end{array}$$

11 (currently amended). ~~Use according to~~ The method of claim 9 wherein, in the compound of Formula (Ib), R<sub>2</sub> is hydrogen and R<sub>3</sub> is lower alkyl, which may be substituted or unsubstituted with at least one electron donating group ~~or/and~~ or at least one electron withdrawing group, NR<sub>4</sub>OR<sub>5</sub>, ~~or/and~~ or ONR<sub>4</sub>R<sub>7</sub>.

12 (currently amended). ~~Use according to~~ The method of claim 9 wherein, in the compound of Formula (Ib), R<sub>3</sub> is lower alkyl which is unsubstituted or substituted with hydroxy or lower alkoxy, NR<sub>4</sub>OR<sub>5</sub> ~~or/and~~ or ONR<sub>4</sub>R<sub>7</sub>, wherein R<sub>4</sub>, R<sub>5</sub> and R<sub>7</sub> are independently hydrogen or lower alkyl, R is aryl lower alkyl, which aryl group may be unsubstituted or substituted with at least one electron withdrawing group, and R<sub>1</sub> is lower alkyl.

13 (currently amended). ~~Use according to~~ The method of claim 12



wherein, in the compound of Formula (Ib), aryl is phenyl and is unsubstituted or substituted with halo.

14 (currently amended). ~~Use according to any one of claims 1 to 13~~  
The method of claim 1 wherein the compound is

~~(R)-2-acetamido-N-benzyl-3-methoxy-propionamide~~ (R)-2-acetamido-N-benzyl-3-methoxypropionamide;

O-methyl-N-acetyl-D-serine-m-fluorobenzylamide;

O-methyl-N-acetyl-D-serine-p-fluorobenzylamide;

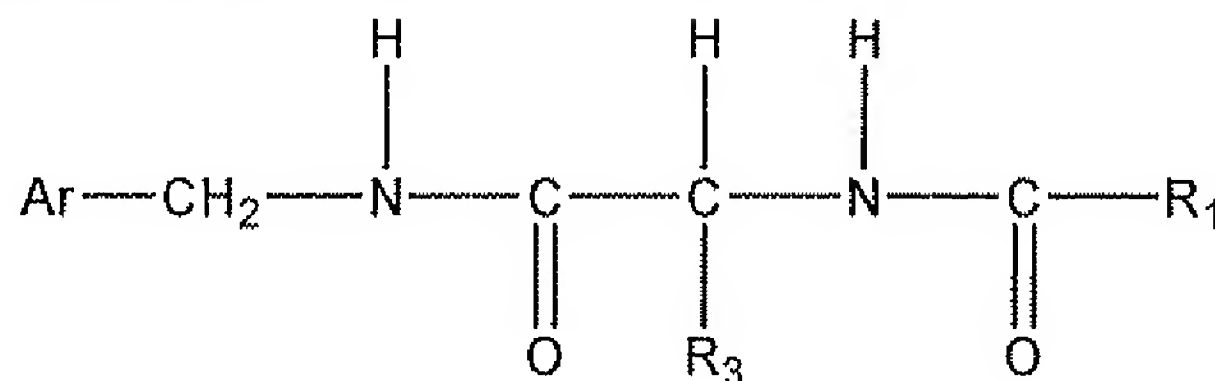
N-acetyl-D-phenylglycinebenzylamide;

~~D-1,2-(N, O-dimethylhydroxylamino)-2-acetamido acetic acid benzylamide~~

D-1,2-(N,O-dimethylhydroxylamino)-2-acetamido acetic acid benzylamide; or

D-1,2-(O-methylhydroxylamino)-2-acetamido acetic acid benzylamide.

15 (currently amended). ~~Use of any one of claims 1 to 14 where in~~ The method of claim 1 wherein the compound has the Formula (IIb)



Formula (IIb)

wherein

Ar is phenyl which is unsubstituted or substituted with at least one halo group;

R<sub>3</sub> is CH<sub>2</sub>-Q, wherein Q is lower alkoxy containing 1-3 carbon atoms; and

R<sub>1</sub> is lower alkyl containing 1-3 carbon atoms,

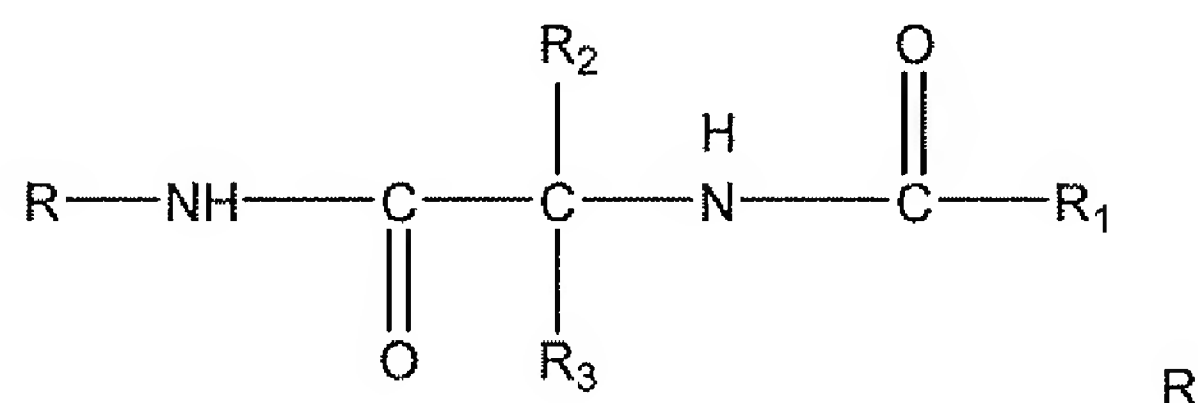
or ~~[[of]]~~ a pharmaceutically acceptable salt thereof.

16 (currently amended). ~~Use according to~~ The method of claim 15 wherein, in the compound of Formula (IIb), Ar is unsubstituted phenyl.

17 (currently amended). ~~Use according to claims 15 or 16~~ The method of claim 15 wherein, in the compound of Formula (IIb), halo is fluoro.

18 (currently amended). ~~Use according to any one of claims 15 to 17~~  
The method of claim 15 wherein, in the compound of Formula (IIb),  $R_3$  is  $\text{CH}_2\text{-Q}$ , wherein Q is alkoxy containing 1–3 carbon atoms and Ar is unsubstituted phenyl.

19 (currently amended). ~~Use of any one of claims 1 to 18~~ The method of claim 1 wherein the compound is in the R configuration ~~having~~ and has the formula



wherein

R is benzyl which is unsubstituted or substituted with at least one halo group;

$R_2$  is hydrogen;

$R_3$  is  $\text{CH}_2\text{-Q}$ , wherein Q is lower alkoxy containing 1–3 carbon atoms; and

$R_1$  is methyl,

or a pharmaceutically acceptable salt thereof.

20 (currently amended). ~~Use according to~~ The method of claim 19, wherein the compound [[which]] is substantially enantiopure.

21 (currently amended). ~~Use according to claims 19 or 20~~ The method of claim 19 wherein, in the formula for the compound, R is unsubstituted benzyl.

22 (currently amended). ~~Use according to claims 19 to 21~~ The method of claim 19 wherein, in the formula for the compound, halo is fluoro.

23 (currently amended). ~~Use according to claims 19 to 22~~ The method of claim 19 wherein, in the formula for the compound,  $R_3$  is  $\text{CH}_2\text{-Q}$ , wherein Q is alkoxy containing 1–3 carbon atoms and R is unsubstituted benzyl.

24 (currently amended). ~~Use according to any one of claims 1 to 4~~ The

method of claim 1, wherein the compound of Formula (Ib) is ~~-(R)-2-Acetamido-N-benzyl-3-methoxypropionamide~~ (R)-2-acetamido-N-benzyl-3-methoxypropionamide or a pharmaceutically acceptable salt thereof.

25 (currently amended). ~~Use according to~~ The method of claim 24, wherein the ~~compound~~ compound is substantially enantiopure.

26 (currently amended). ~~Use according to any one of the preceding claims~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for treatment with doses of the~~ compound is administered at a dose of at least 100 mg/day, ~~preferably of at least 200 mg/day, more preferably of at least 300 mg/day, most preferably of at least 400 mg/day.~~

27 (currently amended). ~~Use according to any one of the preceding claims~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for treatment with doses of the~~ compound is administered at a dose of at a maximum 6 g/day, ~~preferably of at a maximum 3 g/day, more preferably of at a maximum 1 g/day and most preferably of at a maximum 400 mg/day.~~

28 (currently amended). ~~Use according to any one of the preceding claims~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for treatment with~~ compound is administered at increasing daily doses until a predetermined daily dose is reached which is maintained during ~~[[the]]~~ further treatment.

29 (currently amended). ~~Use according to any one of the preceding claims~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for treatment~~ compound is administered in at most three doses per day, ~~preferably two doses per day, more preferably in a single dose per day.~~

30 (currently amended). ~~Use according to any one of the preceding claims~~ The method of claim 1, wherein ~~the pharmaceutical composition is prepared for an~~ administration of the compound ~~resulting results~~ in a plasma



concentration of 7 to 8 µg/ml (trough) and 9 to 12 µg/ml (peak), calculated as an average over a plurality of treated subjects.

31 (currently amended). ~~Use according to any one of the preceding claims-~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for treatment-~~ compound is administered for at least one week, ~~preferably at least two weeks, more preferably at least four weeks, most preferably at least eight weeks.~~

32 (currently amended). ~~Use according to any one of the preceding claims-~~ The method of claim 1, wherein the ~~pharmaceutical composition is prepared for oral administration-~~ compound is administered orally.

33 (currently amended). ~~Use according to any one of the preceding claims, wherein the pharmaceutical composition comprises-~~ The method of claim 1, further comprising administering to the subject a further active agent effective for ~~[[the]] prevention, alleviation or/and-~~ or treatment of headache ~~or/and-~~ or CSD-associated disorders.

34 (currently amended). ~~Use according to-~~ The method of claim 33, wherein the ~~pharmaceutical composition comprises-~~ compound of Formula (Ib) and the further active agent are present in a single dose form ~~or comprises a separate dose form comprising a first composition comprising a compound as defined in any of the claims 1 and 5 to 25 and a second composition for the prevention, alleviation or/and treatment of headache or/and CSD-associated disorders.~~

35 (currently amended). ~~Use according to any one of the preceding claims, wherein the pharmaceutical composition is prepared for administration in mammals-~~ The method of claim 1, wherein the subject is a mammal.

36 (currently amended). ~~Use according to-~~ The method of claim 35, wherein the ~~pharmaceutical composition is prepared for administration in~~



~~humans~~ subject is human.

37 (currently amended). A ~~pharmaceutical composition~~ therapeutic combination comprising

- (a) a compound ~~as defined in any of the claims 1 and 5 to 25~~ of Formula (Ib), and
- (b) a further active agent effective for ~~[[the]]~~ prevention, ~~alleviation or/and~~ or treatment of treatment of headache ~~or/and~~ or CSD-associated disorders.

38 (currently amended). The ~~pharmaceutical composition according to combination of~~ claim 37, ~~which is~~ wherein the compound of Formula (Ib) and the further active agent are present in a single dose form ~~or comprises a separate dose form comprising a first composition comprising a compound as defined in any of the claims 1 and 5 to 25 and a second composition for the prevention, alleviation or/and the treatment of headache or/and CSD-associated disorders.~~

39 (new). The combination of claim 37, wherein the compound of Formula (Ib) and the further active agent are present in separate dose forms.

40 (new). The method of claim 33, wherein the compound of Formula (Ib) and the further active agent are present in separate dose forms.